MCAS MIRAMAR

NATURAL & CULTURAL RESOURCES

Presented by MCAS Miramar Natural Resources Division

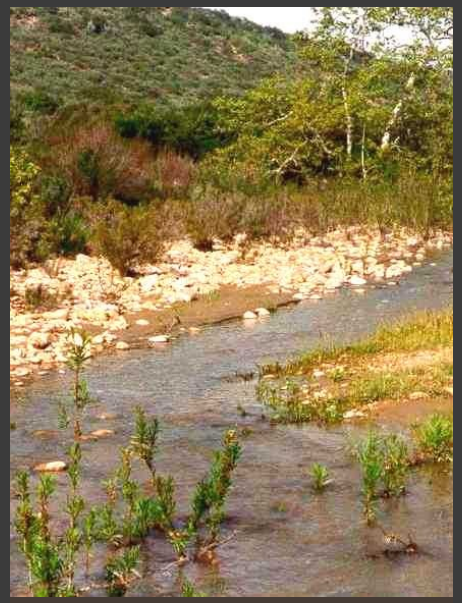
OUR NATURAL RESOURCE MISSION

- To **support** the operational requirements of units operating on MCAS Miramar by:
- **To ensure compliance** with federal laws and regulations regarding **natural and cultural resources**.
- To uphold the guidelines and policies in **Marine Corps Order P5090.2A**: Environmental Compliance and Protection Manual
- To provide information, expertise and awareness regarding conservation of natural and cultural resources.

PRIMARY NATURAL AND CULTURAL ISSUES AT MCAS MIRAMAR

1. Conserving and Protecting:
   - Sensitive Habitat for Threatened and Endangered Species
   - Streambed (Riparian) Areas
   - Vernal Pools
   - Pre-historic & Historic Sites
2. Providing information, expertise and awareness of natural and cultural resources at MCAS Miramar

Preserving and Protecting



Left to Right

- Coastal Scrub Habitat for threatened species
- Streambed (riparian) areas
- Vernal pools
- Pre-historic & historic sites

ENVIRONMENTAL LAWS

- Laws most applicable to MCAS Miramar natural and cultural resources:
  - National Historical Preservation Act
  - Archaeological Resources Protection Act
  - Endangered Species Act
  - Migratory Bird Treaty Act
  - Clean Water Act

ENDANGERED SPECIES ACT

GENERAL INFORMATION

- Any operations or training in natural areas of ~~on~~ the station must be approved through the Public Works or Training Area Mgmt Office in coordination with EMD.
- "Taking" of a threatened or endangered species is prohibited.
  - "**Taking**" means "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in such conduct."
- Penalties for ESA violations can include fines up to $200,000 and 1 year imprisonment per take.

VERNAL POOLS

GENERAL INFORMATION

- A type of wetland that hosts unique and endangered plant and animal species.
- Water only present during rainy season.
- During wet season, fairy shrimp lay eggs in vernal pools which settle into soil at bottom. Eggs stay in the soil throughout the dry season. Once the wet season return, eggs will hatch.
- Driving through vernal pool areas can spread the fairy shrimp eggs to other locations, putting further training restrictions on Marines.

VERNAL POOLS (WET SEASON)

VERNAL POOLS (DRY SEASON)

DESTRUCTION

- Development
- Off-road vehicle activity
- Concentrated foot traffic
- Other ground disturbing activities

VERNAL POOLS AND WATERSHEDS

Legend
Vernal Pools/Ponded Sites with Endangered Species
Other Ponded Sites Surveyed (no Endangered Species)
Vernal Pool Habitat Sheds

Least Bell's Vireo
(Federally Endangered)

San Diego Fairy Shrimp
(Federally Threatened)

Willowy Monardella
(Federally Endangered)

California Gnatcatcher
(Federally Threatened)

MIGRATORY BIRD TREATY ACT

GENERAL INFORMATION

- It is unlawful to pursue, hunt, kill, capture, possess, sell, purchase or barter any migratory bird; including their feathers, nest or eggs.
- Violators face potential penalties including fines and imprisonment.
- Exceptions include special purpose permits and authorized hunting seasons.

Preclude Bird Nesting Problems

- The Migratory Bird Treaty Act protections cover active bird nests.
- Take measures to prevent bird nesting where incompatible with operations.
- If a bird nests contains eggs or young, it must be left alone until the young have flown away.

Sites

- Pre-historic and historic sites at MCAS Miramar
- 9 sites appear eligible for listing on National Register of Historic Places
- All archaeological/ historic sites are off-limits.

ARCHAEOLOGICAL RESOURCES PROTECTION ACT

GENERAL INFORMATION

- Prohibits the unauthorized excavation, removal, damage, or trafficking of historical or archaeological materials
- Penalties to individuals could include fines up to $100,000 and 5 years imprisonment.
- If you find archaeological artifacts, leave them there and notify Miramar's Environmental Management Department

NATIONAL HISTORIC PRESERVATION ACT

GENERAL INFORMATION

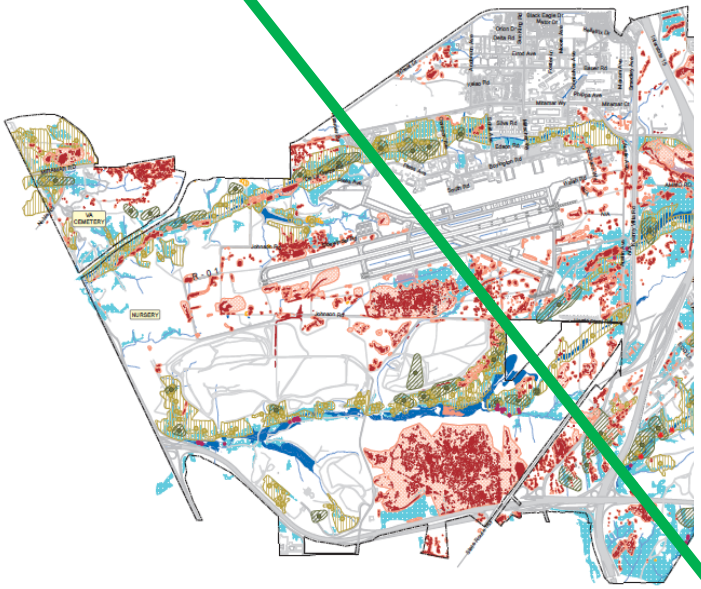
- NHPA establishes requirements for designating and protecting historic structures and resources potentially eligible for inclusion on the National Register of Historic Places (NRHP).
- NHPA made up of three stages:
  - Identify and evaluate any impacts to historical resources.
  - Determine the effects on those historic resources
  - Develop measures to avoid or mitigate adverse effects.

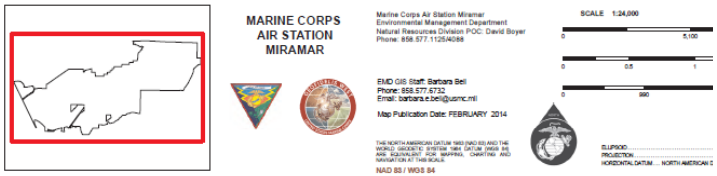
http://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/Sensitive%20Resou

http://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/Sensitive%20Resou

Bing Wea... Mar... Soc... CR ... GIS... Env... Pur...

MCAS MIRAMAR
SENSITIVE RESOURCES
FEBRUARY 2014





MCAS Miramar-EMS Home | About | Divisions | Programs | Contact Us | Unit Home

HOME > Divisions > NATURAL RESOURCES DIVISION > NATURAL RESOURCES

SITEDATA

Environmental Management (S-7)

"MORE THAN OUR CODE . . . IT'S OUR CORPS"

The Environmental Management System of MCAS Miramar

NATURAL RESOURCES

Program Manager
Director, Natural Resources
(858) 577-1125

The Natural Resources Division is responsible for natural resource conservation and compliance aboard MCAS Miramar. Primary resources of management and conservation concern involve threatened and endangered species, wetlands, invasive plant control, and soil conservation.

- Current Sensitive Resources Map
- Marine Corps Natural Resources Program Guide (2010)

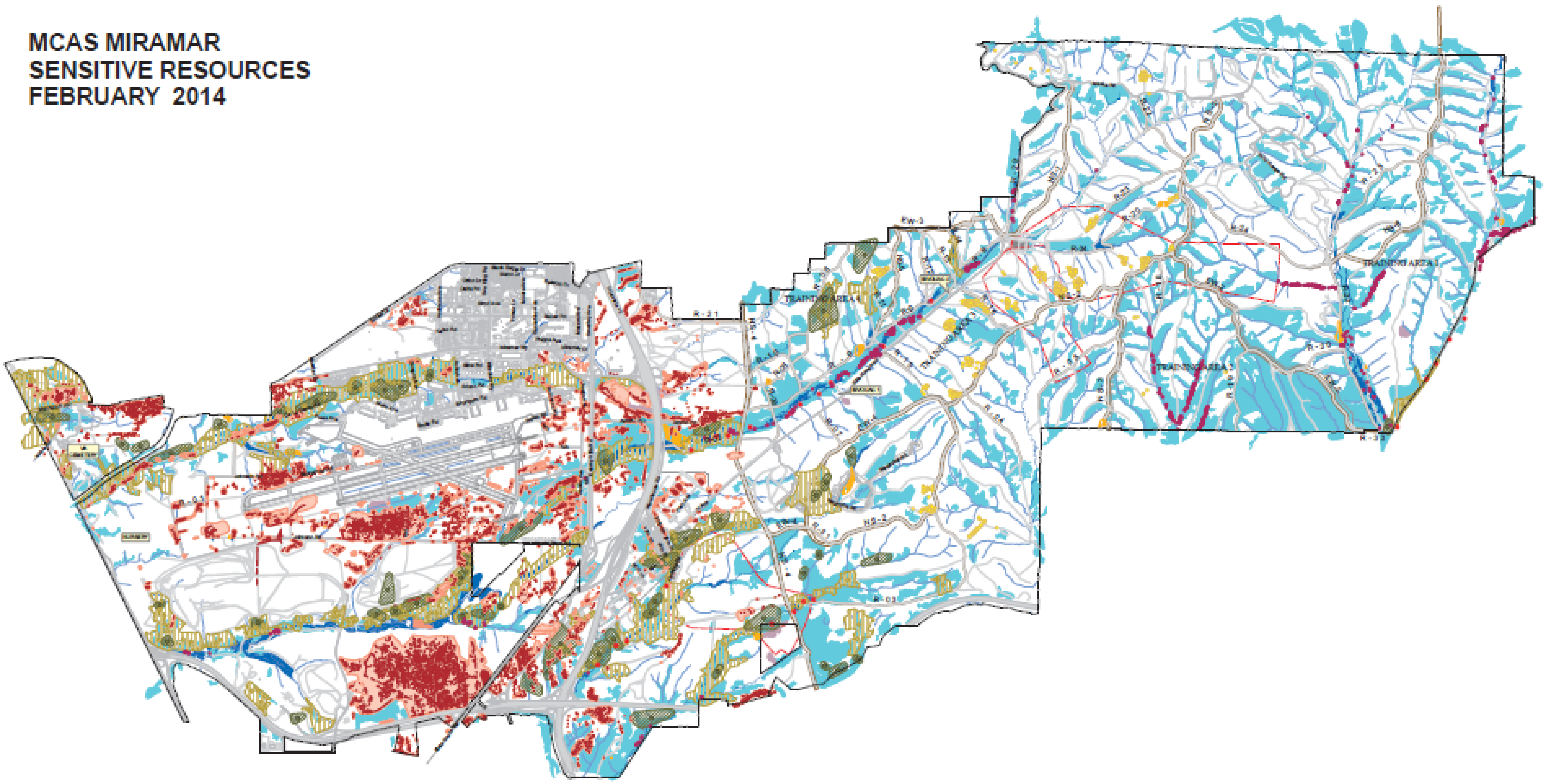
ENVIRONMENTAL REQUIREMENTS

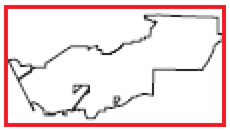
LINKS

F A Qs (Freque
Welcome Aboa
Environmental
Environmental
Spill Response
Hazardous Was
Environmental
ESOP's
Station ECPSO
Environmental
2015 Audit/Insp
Environmental

http://www.miramar-ems.marines.mil/Divisions/NaturalResourcesDivision/NaturalResources.aspx

MCAS MIRAMAR
SENSITIVE RESOURCES
FEBRUARY 2014





MARINE CORPS AIR STATION MIRAMAR

Map Publication Date: FEBRUARY 2014

SCALE

0 — 5,000 — 10,000 — 15,000 Feet

0 — 0.5 — 1 — 1.5 Miles

NOTES

Surveyed Endangered Species

- WILLOW MONARDELLA
- DEL MAR MANZANITA
- 2013 CA GNATCATCHER SIGHTINGS
- HISTORICAL CA GNATCATCHER SIGHTINGS (2004, 2007, 2009)
- LEAST BELL'S VIREO TERRITORIES (2011)
- 2013 CA GNATCATCHER USE AREAS
- HISTORICAL CA GNATCATCHER USE AREAS (2004, 2007, 2009)

Areas Surveyed for Vernal Pool Resources

- VERNAL POOLS (PONDED SITES WITH ENDANGERED SPECIES)
- OTHER PONDED SITES SURVEYED (NO ENDANGERED SPECIES)
- VP SURVEY WATERSHEDS

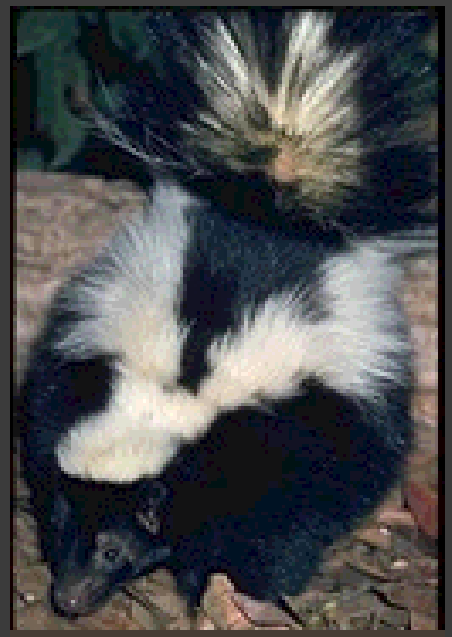
Sensitive Vegetation Types (2000)

- NATIVE GRASSLANDS
- POSSIBLE DIEGAN COASTAL SAGE SCRUB (including burned and disturbed) 2000

Other Sensitive Areas

- ADDITIONAL SENSITIVE RESOURCES
- POSSIBLE WATERS OF THE U.S.

HAZARDOUS PLANTS AND ANIMALS



RATTLESNAKES

- Two rattlesnakes occur on MCAS Miramar
- Coils up before striking
- Generally aggressive only when approached
- Bites can cause hemorrhaging, intense pain, and even death, if not treated

has three leaf clusters.

POISON OAK

- Range in color from red to green depending on season.
- Most often found in shrub form in bottom land areas.
- Urushiol oil from plant can cause rash and severe itching.
- Even dead or fallen leaves and bare stems can cause rash

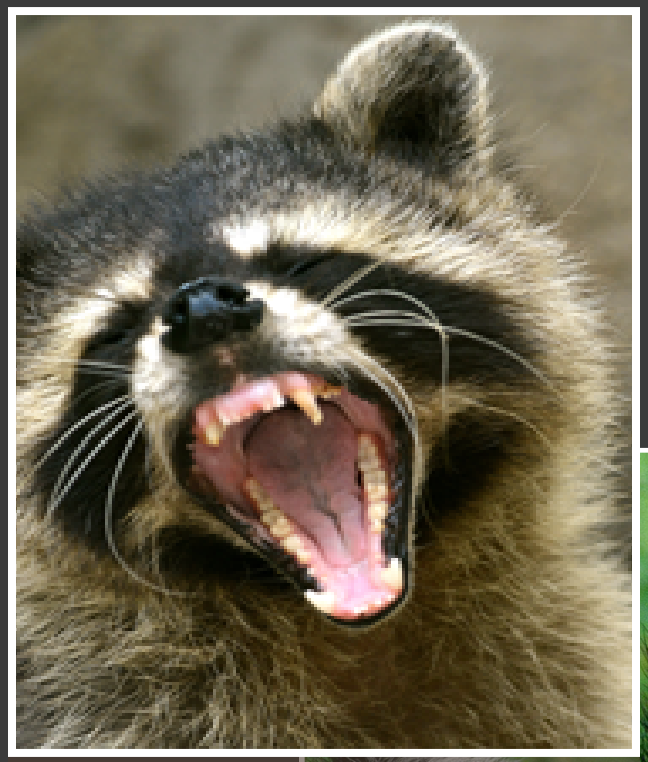
POISON OAK

If exposed:

- Wash exposed skin in warm water and soap.
- Wash all clothing that has come into contact with the plant.
- Apply calamine lotion or topical steroid to the skin to relieve symptoms.

BEES

- Africanized honey bees have been found in county but not problematic.
- Found in suitable cavities (trees, ground, old buildings, and when swarming).
- Keep an eye out for hives and give them space.
- If attacked, run away and seek shelter inside.



RACCOONS, COYOTES, and SKUNKS

- Never approach a wild animal even if it seems harmless.
- Most wildlife typically avoid humans.
- May attack/bite if feeling trapped or cornered.
- Some carry rabies.
- Wildlife is attracted to food left in and around garbage bins.
- Keep your work areas clean

FINAL TAKEAWAYS

1. Protect and be mindful of the natural and cultural resources at MCAS Miramar.

2. Be aware of your surroundings and understand the unique natural circumstances of your environment.

MCAS Miramar Natural Resources Division staff may be contacted at (858) 577-1125/6426/6498/1108.